No 5

Phlegmasia dolens

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# An Essay on Phlegmatia Dolens

by

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Phlegmatia Dolens

Among the variety of definitions given by authors of Phlegmatia Dolens, I find none so short, and at the same time so accurate, as that of Cullisons which I shall in the general adopt.

This affection he calls Oedema Puerperarum, by which he means a swelling of the lower extremity or sometimes both, to which lying-in women are occasionally subject.

It is a tumor of the elastic kind, white, shining, pale, painful, and by some considered of a milky origin, not retaining the pit made by the pressure of the finger, frequently attacking lying-in women, but very seldom those who are pregnant.

The inferior extremities are the seats of this disease sometimes one sometimes both; it however but seldom attacks both at the same

same time, it affects the right oftner than the left and but rarely attacks the supe=
:rior extremities.

The tension and pain of the groin general=
:ly occur twelve or fourteen days after parturition, a swelling follows which gradually extends it=
=self to the labium of the side affected, the thigh and leg successively also become involved in the disease, and finally the pain tension & subsequent swelling passes to the foot; it is always ushered in or accompanied by fever.

The disease continues from four to eight weeks and sometimes even for a longer period —

The complaint with which it is most li=
:able to be confounded is Anarsarca, but an attentive observer will easily distinguish it by the following signs. It generally com=
=mences at the upper part of the lower ex=
=tremity, the swelling is hot and painful, and it does not retain the impression

made

by the finger, which is the very reverse in Anasarca.

Having thus briefly given the history of the Phlegmatia Dolens; I shall proceed to pass in review the various Theories which have been formed to account for its phenomena. Having done this, I shall endeavor to support the one I think the most correct.

The different Theories may be classed under five distinct heads and they are as follow viz.

First. A deposition of milk.
Secondly. Rupture of the Lymphatics.
Thirdly. Inflammation of the Lymphatics.
Fourthly. Inflammation of the Lymphatics and Cellular membrane.
Fifthly. Inflammation of the Cellular membrane alone.

First. A deposition of milk. It appears that Puzos was the author of this Theory and

and I believe that he was the first who gave an accurate account of the disease.

The arguments which were adduced in fa:vor of this hypothesis were, first. That in this complaint little or no milk is formed after the attack, or if formed in tolerable quan:tity, when the patient is seized, it is quickly much diminished or totally disappears. 2dly. That the fluid deposited in the cellular membrane of the lower extremity resembles coagulated or degenerated milk.

Against the first argument it may be urged and with great propriety, that milk cannot be formed by any other means than the glandu:lar parts of the breast, and that in those cases where the milk diminishes or totally disap:pears we cannot say that it is owing to a translation of milk to the leg, for it is well known that in some instances the quantity is not diminished until after the accession of the

the complaint, which proves that it is rather the effect than the cause: where the formation of milk is impeded or entirely prevented either in consequence of diminished secretion or increased absorption previous to the attack, we cannot fairly conclude that the milk excites the disease by being translated to its seat, I think it will be more correct to suppose that the diminished discharge from the breast by inducing a plethoric state of the system and consequently increasing the tension and tone of the blood vessels may favor sub-cutaneous inflammation attended by an extravasation of fluids which resemble milk in appearance but not in properties.

Against the second argument it can be urged that the deposited fluid is not milk, although it may resemble it in color; admitting that the effused humor is whitish, and separated into serous and coagulable parts it

it does not prove it to be milk; but perhaps the very reverse, for it is an incontrovertable fact that, human milk is not coagulable while contained in the system, it therefore follows from what has been said, that this hypothesis must certainly be incorrect. But no sooner where the errors of this theory pointed out than one not less exceptionable was put forth and supported by some of the most respectable names. In 1784 Wm White the author of this new theory gave the following account of it. He supposed that the disease originated from a rupture of the Lymphatics of the Pelvis, caused either by the Gravid Uterus or by the passage of the head of the child through the Pelvis. In opposition to this theory it can be alledged 1st That no experiments have as yet proved that the Lymphatics can be ruptured without entirely destroying the vessels of the part. 2dly As to the head of the

child

child in its descent through the Pelvis occasion-
ing rupture of the Lymphatics and being the
cause of the disease, it is proved not to be the
fact from the circumstance of its occurring
sometimes in men when no such rupture
could take place 3dly It is also known to be
a fact that the rupture of the Lymphatics
sometimes happens when it is not followed
by Phlegmatia Dolens. It may also be asked
why this disease does not always take place after
labor if this were the cause of it? 4th If the rupture
take place from the obstruction of returning
fluids, the vessels must be ruptured below
the pressure, nor can any reason be assign-
ed why the breach should be made always
in one precise spot of the lower extremity
rather than in another. 5th I think it would
be more correct to suppose, that if the Lymphat-
ics, owing to the pressure of the Uterus and its
contents would not transmit the Lymph that
they

they would become varicose and their diam:
:eter enlarge rather than rupture. 6th We
have cases on record that the swelling is re:
:moved in the course of forty eight hours; if
this be a fact, and I believe there is no doubt
but that such cases have occurred, how is
it possible that the vessel could heal up so
soon as the time mentioned so as to trans:
:mit the lymph?

Having thus concluded my objections to Mr
Whites theory I shall proceed to consider the one
which attributes this disease to an inflamma:
:tion and enlargement of the Lymphatics. In
1792 Mr Faye of Gloucester published an ac:
:count of this disease. He attributed it to the
above mentioned cause, and was I believe
in fact the author of it. He supposed the
lymph to be accumulated in the cellular
membrane in consequence of the enlarge:
:ment of the lymphatic glands and vessels,
thereby

thereby impeding the absorption and trans=
mission of the lymph to the Thoracic duct;
but he confesses that his own experiment does
not prove that the inflammation beginning
in the Lymphatics themselves is founded in
fact. It appears that this theory was found:
ed and established upon one case alone:
a case where the patient felt exquisite pain
in the harm, and where he says he could
perceive the lymphatics a little enlarged.
But if I may be allowed to judge from all
the cases which we have upon record, I be:
:lieve that the inflammation and enlarge:
:ment of the Lymphatics is but a rare occur:
:rence and by no means essential to the dis:
:ease. A tenderness in the Glands has in sev=
:eral instances been observed I am willing
to allow; but when it happens it either does
not exist in the beginning, or else so very
slightly as by no means to be adequate to
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the production of the symptoms. I am therefore induced to believe that when it does occur, that it is the effect and not the cause of the disease. We all know that inflammation of the Inguinal and Femoral glands is extremely liable to terminate in suppuration. How happens it then that these glands which are supposed to be principally affected do not often suppurate in Phlegmatia Dolens? Mr Faye imagines that the external Iliac glands sometimes suppurate, but I do not see how this can be the case 1st because we see that suppuration when it does occur takes place where there are no glands 2ly the suppuration is too extensive to admit of this supposition, for when suppuration takes place in the limb, the matter extends over all the back part of the limb, and below the seat of the glands, and 3ly inflammation and swelling of the Lym=

=phatics

=phatics may take place without causing any pain, and I believe this is generally the case. How then is it possible to consider this the cause, when it is well known to every person who has any experience with the disease, that Phlegmatia Dolens is attended with the greatest sensibility and tenderness, so much so that the patient cannot bear even the weight of the bed clothes? I could proceed and state many more ar:=guments against this theory, but I think it will be occupying time unnecessarily. The theory which I have just attempted to prove erroneous, continued to prevail until Dr Hull's publication which appeared about the year 1800. After stating at length the dif=ferent theories and his objections to them, and receiving his information from all the best medical authority he was able to procure, together with his own experience,

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he modifies the theories, and attributes the disease to an Inflammation of the Lymphatics and cellular membrane. After giving the history of the disease, he proceeds to give the causes, which he divides into predisposing and exciting. He considers the predisposing to be, first, the increased irritability and disposition to inflammation which prevail during pregnancy and in a still higher degree for sometime after parturition. 2dly The over distended and relaxed state of the blood vessels of the Inferior part of the trunk and lower extremities produced during the latter months of Utero-Gestation. He says that during pregnancy the circulation through those parts is very much impeded, and also in consequence of the great pressure of the enlarged Uterus upon the Iliac veins it not uncommonly happens, that the blood by being unnaturally accumulated

accumulated in the limbs of pregnant women produces a distended or even varicose state of the veins, and an increased effusion of water from the exhalants into the cellular membrane of the limbs, and that there is reason to believe that the arteries also are kept constantly fuller than in their natural state, owing to the obstructed return of venous blood. Hence the blood vessels and the cellular texture of the inferior extremities & the inferior part of the trunk being overstretched and weakened during pregnancy, these parts are rendered more subject to inflammatory affections and congestions than the superior part of the trunk and arms. The arguments which I have to urge against the Lymphatics being involved in this disease as the cause are as follow- 1st That the tumefaction of the limbs produced in consequence of the inflammation of the Lymphatics, is

neither

neither so painful at first, nor so tender or tense, nor so difficult of removal, nor so free from discoloration as the swelling of the dis:ease of which I am treating. 2d. If this dis:ease consisted of an inflammation of the above mentioned vessels, occasioned by pressure of the head of the child in its passage through the pelvis upon them; instead of seldom happening during the first period after delivery, it should always take place within the above mentioned time, because those vessels may be supposed to have suffered more from injury during labor. 3rd. The appearance of the complaint in the other lower extremity sooner or later after one has been attacked which not unfrequently happens. It has been asserted by some that this is a local disease, but I think they are incorrect, for this reason, the disease is frequently accompanied and ush:ered in by considerable marks of pyrexia

during

during which time the pain, swelling, and stiffness invades the upper part of the lower extremity. Having thus briefly stated my objections to Dr Hall's theory, I shall proceed to state the theory which has been offered to account for its phenomena, and which attributes this disease to an inflammation of the cellular membrane alone.

This theory was first advanced by Dr De Lacy of this city and being governed entirely by his own experience he gives as the most correct mode of treatment, and which I believe is now generally adopted. My reasons for believing that this is the correct theory, are the following 1st That if the Lymphatics were in the least inflammed that the disease would advance with more rapidity than it generally does. 2dly We are all well aware that inflammation of the cellular membrane may take place without any redness of the part, which is not

not the case with the lymphatics. It may be asked how can there be inflammation unless the part becomes red? My answer is, that redness though a general attendant of inflammation in the human body does not itself constitute inflammation, nor is it in fact a circumstance essential to it, for in many instances redness will take place without there being any inflammation; we have an instance of this in blushing, the cheek exhibits redness and an increase of heat, sensible both to the eye and touch, but there is no pain, consequently no inflammation; and on the other hand, the cornea when we cannot trace a single vessel carrying red blood beyond its margin is frequently af:fected with a high degree of inflammation, we have also examples of this in bone car:tilage &c. 8/. The termination of the disease I think is one of the strongest arguments in favor

favor of inflammation and in fact puts it beyond a doubt, for it may terminate as all inflammations do, either by resolution, effusion, suppuration, or gangrene. With this I conclude what I have to say of the various theories which at different times had the ascendency. It may easily be perceived that the last is the one I think correct and by which I shall conduct the treatment of the disease.

No matter what the theories which at different times prevailed might have been, it did but in a slight degree alter the plan of treatment, for it appears that the depleting mode was the one generally adopted, but it differed in this respect, some preferring blood letting both general and topical, some cathartics, some emetics, and some the conjoint operation of all.

It appears to me that it will be, and in fact is necessary to divide the disease into

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three distinct stages for the purpose of giving an account of the remedies as they apply & are useful in the different stages.

1st. The early or inflammatory stage.

2d. The advanced, or where the inflammation has nearly subsided.

3d. The convalescing stage.

The indication in the first stage is very obvious. It is to reduce arterial action & thereby relieve the inflammation. To accomplish this we are to use all the depleting measures. The first of which is Blood-letting both general and topical, we are to bleed from the arm until inflammation is reduced, if we find we cannot succeed by taking blood from the arm, we may apply leeches to the part. We are also during this time to give a purge the best of which is some one of the neutral salts. The next thing to be done is to make local applications to the limb with the view of

apirting

assisting the depleting measures. The best of which is the vinegar bath which is to be used in the following manner. The bed clothes are to be raised by means of hoops placed under them, we are next to take some bricks and heat them, then pour upon them while hot the vinegar, wrap the bricks in flannel and while in this state place them on the side of the limb affected. They are to remain from fifteen minutes to half an hour or even longer if the patient can bear it & then removed; this application is to be made three or four times a day, if perspiration be not induced in fifteen minutes they should be removed, as it is a proof that we have not depleted sufficiently, we must therefore discontinue them and again resort to venesection, leeching or purging, as the case may require and afterwards the bricks may be applied in the manner just described. Sometimes

-times we are unable after depleting as far as we can with safety carry it, to reduce the force of circulation, it is here we may derive great benefit from the tincture of Digitalis. The mode in which it is to be given is about ten drops three times a day and continued until the pulse be reduced.

Should the disease attack the opposite limb which sometimes happens, we are to pursue the same mode of treatment excepting in those cases where the patient is previously exhausted by the previous depletion; here we are to commence immediately with the vapour bath, and if there is much action in the blood ves-sels we may resort with great benefit to leeching and to the tincture of Digitalis purpurea given as before directed.

The disease is sometimes preceded by Uter-ine Hoemorrhage which may have caused great debility, and the pulse remain quick and

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and frequent, here the debility of the system is so great that we cannot bleed, we may also in this instance with a view to lower the pulse resort to the tincture of Digitalis. It has been recommended to apply a roller round the limb during the inflammatory stage, I have no doubt but that it might be useful in this stage of the complaint provided the patient could bear it, but it is well known that the limb is so very sensible and the pain so very severe that the patient cannot bear the weight of the bed clothes; therefore it would be impossible to use it. In the more advanced stage of the disease after inflammation has in some measure been reduced, then probably the roller will be found very beneficial.

The first stage having passed over, the second one comes on which may be known by the swelling partaking of the Oedematous nature

nature, retaining the impression made by the finger when pressed upon. The remedy which has proved very serviceable is an ox's gall diffused in a quart of spirits and applied to the legs by means of gentle frictions. After the disease is entirely removed there is generally an oedematous state of the limb. The remedy for the relief of this is the roller and exercise, and fumigations of rosin which may be used as follow, place the limb affected over a tub which has hot embers in it, cover the limb with a blanket, and sprinkle on the embers the common rosin. The patient during the whole period of the complaint should be kept in a horizontal position. The strictest attention should be paid to her diet which should be of the anti-phlogistic kind; it should consist of farinaceous substances such as rice & milk tapioca barley &c.

If in the second stage she be very much debilitated, we may allow her a little animal food & in the third her diet should be generous but not stimulating, exercise in a carriage is highly useful.